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Yuri N. Kulchin Roman V. Romashko Alexander V. Syuy Editors

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Introduction

The 15th Asia-Pacific Conference on Fundamental Problems of Opto- and Microelectronics (APCOM 2016) was held in the far east of the Russia Federation in October 2016. Since 2000, the conference has been the venue for cutting-edge achievements in a variety of topics related to opto- and microelectronics. During the intervening years, the focus of the conference has shifted to fundamental and applied aspects of optics, photonics and nano-electronics and covers photonic communication, optical measuring systems, photonic sensors, as well as their application in life-sciences, bio-medicine, social welfare, industrial facilities, and structural health monitoring. The conference also covers novel materials and structures for optics and photonics, new principles and methods for optical information processing and imaging, and nano- and bio-photonics.

In the past, APCOM papers have been published as SPIE Proceedings (volumes 4513, 4357, 5129, 5851, and 6595); and now, with the publication of this SPIE volume, we are glad to have restored the long-established tradition.

We are looking forward to receiving submissions for the 16th APCOM conference in 2017.

Yuri N. Kulchin SPIE Fellow